

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re Patent Application of: Sang Young Kim et al.

Application Serial #: 07/964,362

Filed: October 21, 1992

Examiner: B. Everhart

Docket: 9983.3US01

Group Art Unit: 1109

Title: METHOD FOR FILLING CONTACT HOLES WITH METAL BY TWO-STEP DEPOSITION

TRANSMITTAL SHEET

The Commissioner of Patents and Trademarks  
 BOX PATENT APPLICATION BRANCH  
 Washington, D.C. 20231

Sir:

We are transmitting herewith the attached:

- ☒ A return postcard.
- ☒ Check of \$730.00 to cover the FWC application filing fee.
- ☒ Check of \$870.00 to cover the extension fee in the parent case (07/964,362).
- ☒ Transmittal sheet in duplicate (1 pg. each).
- ☒ Petition for Extension of Time (1 pg.).
- ☒ REQUEST FOR FILE WRAPER CONTINUING APPLICATION UNDER 37 CFR 1.62 (4 pgs.).

The filing fee has been calculated as follows:

|  | CLAIMS<br>AS FILED<br>/ AMENDED |   | BASIC FEE<br>COVERS | NUMBER<br>EXTRA<br>CLAIMS | SMALL ENTITY |       | OR | OTHER  |       |
|--|---------------------------------|---|---------------------|---------------------------|--------------|-------|----|--------|-------|
|  |                                 |   |                     |                           | RATE         | FEE   |    | RATE   | FEE   |
| BASIC FEE                                | -----                           |   | -----               | -----                     | ----         | \$365 |    |        | \$730 |
| TOTAL<br>CLAIMS                          | 6                               | - | 20                  | = 0                       | x 11         | = \$  | OR | x 22   | = \$  |
| INDEPENDENT<br>CLAIMS                    | 3                               | - | 3                   | = 0                       | x 37         | = \$  | OR | x 74   | = \$  |
| FIRST MULTIPLE DEPENDENT CLAIM PRESENTED |                                 |   |                     |                           | +115         | = \$  | OR | +230   | = \$  |
| TOTAL FEE DUE:                           |                                 |   |                     |                           | \$           |       |    | \$ 730 |       |

Please charge any additional required fees or credit overpayment to Deposit Account No. 13-2725. A duplicate copy of this sheet is enclosed.

MERCHANT, GOULD, SMITH, EDELL, WELTER & SCHMIDT  
 3100 Norwest Center, Minneapolis MN 55402 (612-332-5300)

By: Philip S. Yip  
 Name: Philip S. Yip  
 Reg. No. 37,265

CERTIFICATE UNDER 37 CFR 1.10:

X Express Mail no. TB77198340XUS

Date of Deposit: 10/24/94

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and addressed to the Comm. of Patents & Trademarks, Washington, DC 20231.

By: Tina Jalivar  
 Name: Tina Jalivar

MDS:LMG

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

|                        |  |                 |             |
|------------------------|--|-----------------|-------------|
| Applicant:             | Sang Y. KIM  | Examiner:       | T. Bilodeau |
| Serial No.:            | 08/327,887   | Group Art Unit: | 1107        |
| Filed:                 | October 24, 1994   | Docket:         | 9983.3US01  |
| Notice of Allow. Date: | February 20, 1997  | Batch No.:      | J82         |
| Due Date:              | May 20, 1997   |                 |             |
| Title:                 | METHOD FOR FILLING CONTACT HOLES WITH METAL BY TWO-STEP DEPOSITION |                 |             |

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described hereinabove, are being deposited in the United States Postal Service, as first class mail, in an envelope addressed to: BOX ISSUE FEE Assistant Commissioner for Patents, Washington, D.C. 20231, on May 19, 1997.

By: Min Xu

Min Xu

BOX ISSUE FEE  
Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

We are transmitting herewith the attached:

- ☒ Transmittal Sheet in duplicate containing Certificate of Mailing
- ☒ Check(s) in the amount of \$1,290.00, for Issue Fee and check in the amount of \$33.00 for Advance Order of 11 Patent Copies.
- ☒ Other: Part B--Issue Fee Transmittal (PTOL-85B); Communication Re: Submission of Formal Drawings (1 page); Formal Drawing of Fig. 2C (1 page).
- ☒ Return postcard

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers, if appropriate. Please charge any additional fees or credit overpayment to Deposit Account No. 13-2725. A duplicate of this sheet is enclosed.

MERCHANT, GOULD, SMITH, EDELL,  
WELTER & SCHMIDT  
3100 Norwest Center, Minneapolis, MN 55402  
(612) 332-5300

By: Min Xu

Name: Min Xu  
Reg. No.: 39,536  
AX/mas



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08/327887

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application of: Sang Young Kim et al.  
Application Serial # : 07/964,362  
Filed : October 21, 1992  
Docket : 9983.3US01  
Title : METHOD FOR FILLING CONTACT HOLES WITH METAL BY TWO-STEP DEPOSITION

Examiner: B. Everhart  
Group Art Unit: 1109

TRANSMITTAL SHEET

The Commissioner of Patents and Trademarks  
BOX PATENT APPLICATION BRANCH  
Washington, D.C. 20231

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|  | CLAIMS<br>AS FILED<br>/ AMENDED |   | BASIC FEE<br>COVERS | NUMBER<br>EXTRA<br>CLAIMS | SMALL ENTITY |       | OR | OTHER  |       |
|--|---------------------------------|---|---------------------|---------------------------|--------------|-------|----|--------|-------|
|  |                                 |   |                     |                           | RATE         | FEE   |    | RATE   | FEE   |
| BASIC FEE                                | -----                           |   | -----               | -----                     | ----         | \$365 |    |        | \$730 |
| TOTAL<br>CLAIMS                          | 6                               | - | 20                  | = 0                       | x 11         | = \$  | OR | x 22   | = \$  |
| INDEPENDENT<br>CLAIMS                    | 3                               | - | 3                   | = 0                       | x 37         | = \$  | OR | x 74   | = \$  |
| FIRST MULTIPLE DEPENDENT CLAIM PRESENTED |                                 |   |                     |                           | +115         | = \$  | OR | +230   | = \$  |
| TOTAL FEE DUE:                           |                                 |   |                     |                           | \$           |       |    | \$ 730 |       |

Please charge any additional required fees or credit overpayment to Deposit Account No. 13-2725. A duplicate copy of this sheet is enclosed.

MERCHANT, GOULD, SMITH, EDELL, WELTER & SCHMIDT  
3100 Norwest Center, Minneapolis MN 55402 (612-332-5300)

By: Philip S. Yip  
Name: Philip S. Yip  
Reg. No. 37,265

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By: Tina Jalivar  
Name: Tina Jalivar

MDS:LMG



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L. MOS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

|                                 |   |                 |                         |                  |
|---------------------------------|---|-----------------|-------------------------|------------------|
| Docket Number<br><br>9983.3US01 | Anticipated Classification of this Application: |                 | Prior Application       |                  |
|                                 | Class<br>437                                    | Subclass<br>--- | Examiner<br>B. Everhart | Art Unit<br>1109 |

REQUEST FOR FILE WRAPPER CONTINUING APPLICATION  
UNDER 37 CFR § 1.62

Hon. Commissioner of Patents and Trademarks  
BOX FWC  
Washington, DC 20231

Dear Sir:

This is a request for filing a ☐ continuation-in-part ☒ continuation ☐ divisional application under 37 CFR 1.62 of prior application Serial No. 07/964,362, filed on October 21, 1992, entitled METHOD FOR FILLING CONTACT HOLES WITH METAL BY TWO-STEP DEPOSITION by the following inventor(s):

|                         |  |   |  |
|-------------------------|--|---|--|
| Full Name of Inventor 1 | <u>Family Name</u><br><u>KIM</u>             | <u>First Given Name</u><br><u>Sang</u>              | <u>Second Given Name</u><br><u>Young</u> |
| Residence & Citizenship | <u>City</u><br><u>Seoul</u>                  | <u>State or Foreign Country</u><br>Korea <u>KRX</u> | <u>Country of Citizenship</u><br>Korea   |
| Post Office Address     | 139-26, An Am-Dong Sung buk-Gu, Seoul, Korea |   |  |

|                         |  |   |   |
|-------------------------|--|---|---|
| Full Name of Inventor 2 | <u>Family Name</u><br><u>SONG</u>                                  | <u>First Given Name</u><br><u>Yung</u>              | <u>Second Given Name</u><br><u>Wook</u> |
| Residence & Citizenship | <u>City</u><br><u>Seoul</u>  | <u>State or Foreign Country</u><br>Korea <u>KRX</u> | <u>Country of Citizenship</u><br>Korea  |
| Post Office Address     | 306-504, Hyundai Apt., Gwang Jang Dong, Sung Dong Gu, Seoul, Korea |   |   |

C

|                                       |  |  |  |
|---------------------------------------|--|--|--|
| 3-00<br>Full Name<br>of<br>Inventor 3 | <u>Family Name</u><br><u>KIM</u>                 | <u>First Given Name</u><br><u>Hun</u>                  | <u>Second Given Name</u><br><u>Do</u>  |
| Residence<br>&<br>Citizenship         | <u>City</u><br><u>Seoul</u>                      | <u>State or Foreign<br/>Country</u><br>Korea <i>HK</i> | <u>Country of Citizenship</u><br>Korea |
| Post Office<br>Address                | 21-34, Gu wi-Dong, Sung Dong-Gu,<br>Seoul, Korea |  |  |

The above-identified prior application in which no payment of the issue fee, abandonment of, or termination of proceedings has occurred, is hereby expressly abandoned as of the filing date of this new application. Please use all the contents of the prior application file wrapper, including the drawings, as the basic papers for the new application. (Note: 37 CFR 1.60 may be used for applications where the prior application is not to be abandoned.)

1. ☒ Enter the amendments previously filed on \_\_\_\_\_  
August 22, 1994 in the prior application.

2. ☐ A Preliminary amendment is enclosed.

The filing fee is calculated on the basis of the claims existing in the prior application as amended at 1 and 2 above.

| NO. OF CLAIMS<br>AS FILED | NUMBER OF<br>EXTRA CLAIMS | RATE<br>LARGE/SMALL | FEES<br>DUE |
|---------------------------|---------------------------|---------------------|-------------|
| Total Claims:<br>6        | 6 - 20 = 0                | \$22 or 11          | \$ 0        |
| Indep. Claims:<br>3       | 3 - 3 = 0                 | \$76 or 38          | \$ 0        |
| BASIC FILING FEE:         |                           | \$730 or 355        | \$730.00    |
| TOTAL FEE DUE             |                           |                     | \$730.00    |

☐ Small entity status of this application under 37 C.F.R. 1.9 and 1.27 has been established by verified statement previously submitted.

3. Payment of fees:

X Attached is a check in the amount of \$ 730.00.

     Please charge Deposit Account No. 13-2725.

4. The Commissioner is hereby authorized to charge any additional fees as set forth in 37 CFR 1.16 to 1.18 or 37 CFR 1.15(b)1 which may be required such as an extension of time in the parent application or credit any overpayment to Account No. 13-2725.

5. ☒ Amend the specification by inserting before the first line the sentence:

"This is a continuation of U.S. Application Serial No. 07/964,362 filed October 21, 1992." <sup>A</sup>

, now abandoned

2/18/94 6. ☐ A new oath or declaration is included since this application is a continuation-in-part which discloses and claims additional matter.

7. ☒ Priority is claimed under 35 U.S.C §119 to the following application:  
Korean Patent Application No. 91-18500 filed 21 October 1991.

8. ☒ The prior application is assigned of record to  
Hyundai Electronics Industries Co., Ltd.

9. The Power of Attorney in the prior application is to:

Merchant, Gould, Smith, Edell, Welter & Schmidt, P.A.  
3100 Norwest Center  
90 South Seventh Street  
Minneapolis, Minnesota 55402-4131

Address all future communications to (may only be completed by applicant, or attorney or agent of record):

Merchant, Gould, Smith, Edell, Welter & Schmidt, P.A.  
3100 Norwest Center  
90 South Seventh Street  
Minneapolis, MN 55402-4131

Attn.: Mr. Michael D. Schumann

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The undersigned declare further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements made jeopardize the validity of the application or any patent issuing therefrom.

October 22, 1994  
Date

Philip S. Yip  
By: Philip S. Yip  
Reg. No. 37,265

①

Address of Signator:  
MERCHANT, GOULD, SMITH,  
EDELL, WELTER, & SCHMIDT  
3100 Norwest Center  
Minneapolis, MN 55402

☐ Inventor  
☐ Assignee of complete interest  
☒ Attorney or agent of record

"Express Mail" mailing number TB77198340XUS

Date of Deposit 10/24/94

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231.

Tina Jaliray  
Printed name

Tina Jaliray  
Signature